# Meggitt Airdynamics

Technology, capabilities, products













#### About us

Meggitt Airdynamics is an engineeringoriented manufacturing company, recognized as a leading designer and manufacturer of high performance custom fans, pumps, high pressure air compressors and related components for the defense, marine and aerospace markets.

Occupying a modern 100,000 sq ft facility in Southern California, Meggitt Airdynamics first began operations in 1969 as a specialty machine shop dedicated to supporting the close-tolerance, high volume requirements of the local aerospace industry. Through internal growth and a number of strategic acquisitions, the company continues to develop its products and capabilities.

Thanks to dedication, technical excellence and quality, Meggitt Airdynamics is a leader in its field.

- MD 500/600 gearbox lube pump
- Eurofighter coolant pump
- AH-64 nose gearbox lube pump
- BA-609 nacelle oil cooler blower
- F-16 fuel transfer pump
- CH-47 transmission oil cooler blower
- 400 HZ airborne coolant pump



CH-47 transmission oil cooler blower

### Background and experience







### Quality and performance by design

We are committed to manufacturing and delivering quality products to our customers in a timely way, at a competitive price, and in line with contractual requirements.

We are proud to hold an FAA repair station license and quality assurance (QA) system approvals from all major customers including Boeing, Lockheed Martin, United Defense, Honeywell and General Dynamics.

We maintain full performance, sound, vibration, and functional testing capabilities.

Meggitt Airdynamics operates under a QA system that is compliant with AS 900 and MIL-Q-9858, and is also certified to Boeing's D6-82479 (Appendix A) quality system.



## Technology

Meggitt Airdynamics' team is made up of the finest engineering and manufacturing personnel with facilities specifically designed for high levels of productivity and quality. Employing up-to-date computer-aided design equipment, we are able to provide the foundation for products that meet specific and unique customer requirements.

Whatever the need, Meggitt Airdynamics has the engineering expertise to produce the ideal solution. The reputation for excellence we enjoy comes from a comprehensive understanding of application requirements and system packaging skills.

The best in human, technological and manufacturing resources, and experience and application knowledge, enables us to deliver the optimum solution, whatever the specialized application and whatever environment - on land, at sea or in the air.







F-16 Fuel transfer





### Pump applications

- Fuel
- Lube
- Auxiliary
- Bilge
- Electronic cooling

F-16 fuel transfer pump

### Variety of applications

#### Fans

Meggitt Airdynamics' fans and blowers are found in many applications including armored combat vehicles, weapons systems, helicopters and fixed wing aircraft, and are available in a wide range of flows and pressures. Our designs offer high performance, low weight and reliable solutions to numerous specialized customer requirements.

Our mechanically-driven fans are used in engine and transmission cooling and air cleaner scavenge fans for ground vehicles and aircraft. Our electrical drive fans include AC (400Hz) and DC brushless (28-270 VDC) designs. Typical applications include electronic/avionics cooling, crew ventilation, NBC protection, ECS and air conditioning systems.



400Hz airborne coolant pumps



#### Fan applications

- Engine/transmission cooling
- Scavenge
- Personnel/crew compartment cooling
- Electronic cooling
- Air conditioning

#### Pump capabilities

• Flow: 0.2 to 200 GPM

Pressures: 0.5 to 1500 PSI

• Speeds: 1,200 to 25,000 RPM

• Shaft seal free designs

• Fluids: Skydrol, lube oils, fuel, PAO

WEG, PGW, alcohol

### Water pumps

Meggitt Airdynamics manufactures a full line of lube, scavenge and hydraulic pumps. Each is custom designed to optimize performance and reliability with minimum size and weight. Our positive displacement gear, vane and centrifugal pumps are lightweight and operate with fractional horsepower motors. They have no shaft seals or ball bearings, resulting in higher reliability and optimized performance. Our unique motor "canning" process allows low dielectric fluid to circulate between the stator, rotor and bearings for added lubrication and cooling.

We specialize in creative problem solving, tailored to our customer's specific needs. Our strong technology base in fluid power pump and motor design offers our customers proven solutions to their specific requirements.



## Variety of applications

### Compressors

Meggitt Airdynamics' compressors are lightweight, durable, high performance reciprocating machines with integrating components. Our compressors employ a unique "Keystone" cam which eliminates multiple crankshafts journals for a compact and dynamically balanced design. They are used on a number of high pressured pneumatic applications including military and commercial aircraft, land and ocean-based weapon systems and support equipment.

#### Compressor applications

- Military and commercial aircrafts pneumatic systems
- Land and ocean-based weapons system
- Support equipment





#### System capabilities

- Weapon system support
- Shipboard breathing air supply
- Cooling and thermal management

### Systems

Meggitt Airdynamics can help customers who want to procure complete systems or modules. Based on our extensive product experience, we are able to engineer integrated systems to meet specific requirements. Using current computer modeling techniques, we manufacture a number of integrating systems for cooling and thermal applications including weapons system support and shipboard breathing air supply.

















### Meggitt Airdynamics

Meggitt Airdynamics 2616 Research Drive Corona California 92882 USA

> Tel: +1 951 734 0070 Fax: +1 951 734 2594 info@meggair.com

www.meggair.com www.meggitt.com

#### Meggitt Airdynamics is a Meggitt group company.

Headquartered in the United Kingdom, Meggitt PLC is an international group operating in North America, Europe and Asia. Known for its specialized extreme environment engineering, Meggitt is a world leader in the aerospace, defense and electronics industries.

